

P.O. Box 1489 Austin, TX 78767

512-477-9415 1-888-879-8282 Fax 512-469-9527 http://www.tcta.org/



Testimony of Lonnie F. Hollingsworth, Jr.
Director of Legal Services/Governmental Relations
Texas Classroom Teachers Association
to the
Select Committee on Public School Finance Weights, Allotments & Adjustments
April 22, 2010

Dear Members of the Select Committee,

Thank you for the opportunity to testify. I would like to address the topic of school finance and teacher salaries.

Attached are a spreadsheet and chart showing the percentage increase in funding per pupil and average teacher salaries in Texas over the past two decades. If you will look at the chart on the second page, you will see a comparison of funding increases to teacher salary increases. Also included is a line showing teacher salary increases adjusted by decreases in the state average pupil per teacher ratio. The chart shows quite clearly that teacher salaries have not increased commensurately with funding per pupil. In fact, the years where this trend has been adjusted have been those years during which the Legislature provided for a salary increase in conjunction with upward adjustments in the school finance formulas.

Contrary to the criticism that the state minimum salary schedule and the pass through salary increases constitute "unfunded mandates," the data show that the Legislature has made adequate provision for adjustments in teacher salaries through increases in the school finance formulas. In fact, if teacher salaries had been increased at the same rate as funding per pupil, the average teacher salary last year would have been \$6000 greater than it was, even if adjusted by the decline in the state average student teacher ratio. Additionally, the fact that the average teacher salary has lagged behind funding per pupil even when adjusted by declining teacher ratios shows that state standards with regard to elementary class size caps cannot be singled out as a cost driver.

This trend certainly does not show that districts are adequately funded, not does it show that the school finance system is structured to facilitate the attraction and retention of experience teachers by school districts. Contrary to assertions by some observers, experience is a factor in teacher quality. Attached is a summary of some of the research showing positive effects of teacher experience on student learning. It should be a policy goal of the Legislature to create a school finance system that gives districts some financial incentive to attract and retain experienced teachers. The current system does not, with the result that districts tend to "front load" teacher salaries to pay relatively high beginning teacher salaries while more experienced teachers are given short shrift and the career earning potential for teachers is significantly limited. When the school finance system was changed in 1984 from a personnel unit system to a system based on funding per weighted pupil, the Legislature created an experienced teacher allotment to account for the disconnect between teacher salary increases and state funding. Unfortunately, this allotment was eliminated a few years later. We suggest that some similar adjustment be incorporated into future adjustments in school finance formulas and weights.

Thank you again for the opportunity to testify before the Select Committee.



Comparison of increases in teacher salaries to increases in state and local expenditures per pupil. Increases are aggregate percentage increases above the 1991-92 school year. Prepared by Texas Classroom Teachers Association.

Percentage Increase from 1991-92	3.1%	6.4%	9.5%	14.4%	18.9%	23.6%	28.2%	41.4%	47.4%	51.9%	58.4%	57.3%	%9:09	62.4%	75.5%	83.0%	88.4%
Teacher Salary per I Pupil	\$1,782 \$1.837	\$1,896	\$1,951	\$2,038	\$2,118	\$2,202	\$2,284	\$2,519	\$2,626	\$2,706	\$2,822	\$2,803	\$2,862	\$2,893	\$3,127	\$3,261	\$3,357
Average Student/ Teacher Ratio	16.3 16.3	16.1	16	15.7	15.6	15.5	15.3	15.2	14.9	14.8	14.7	14.9	14.9	14.9	14.7	14.5	14.4
Percentage Increase from 1991-92	3.1%	5.1%	7.5%	10.2%	13.8%	17.5%	20.3%	31.8%	34.7%	37.9%	42.8%	43.8%	46.8%	48.4%	58.3%	62.8%	66.4%
Average Teacher Salary ¹	\$29,041.00 \$29,935.00	\$30,521.00	\$31,223.00	\$32,001.00	\$33,038.00	\$34,133.00	\$34,949.00	\$38,287.00	\$39,122.00	\$40,049.00	\$41,479.00	\$41,768.00	\$42,645.00	\$43,105.00	\$45,971.00	\$47,283.00	\$48,334.00
Percentage Increase from 1991-92	%U.Z	10.7%	14.3%	20.7%	19.8%	27.0%	32.4%	43.9%	50.2%	26.6%	60.4%	74.2%	79.8%	83.5%	89.5%	98.7%	111.8%
Operating Expenditures per Pupil	\$3,939 \$4,214	\$4,360	\$4,504	\$4,756	\$4,717	\$5,002	\$5,217	\$5,668	\$5,915	\$6,167	\$6,317	\$6,861	\$7,084	\$7,229	\$7,466	\$7,826	\$8,342
Percentage Increase from 1991-92	%2 2	10.0%	13.6%	20.4%	18.6%	25.7%	31.5%	42.7%	49.1%	55.3%	59.2%	73.1%	100.3%	108.2%	116.3%	128.3%	147.6%
Total Expenditures per Pupil	\$4,452 \$4,774	\$4,898	\$5,057	\$5,358	\$5,282	\$5,597	\$5,853	\$6,354	\$6,638	\$6,913	\$7,088	\$7,708	\$8,916	\$9,269	\$9,629	\$10,162	\$11,024
School Year	1991-92	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09

Teacher salary if average teacher salary per pupil had kept up with increases in operating expenditures per pupil

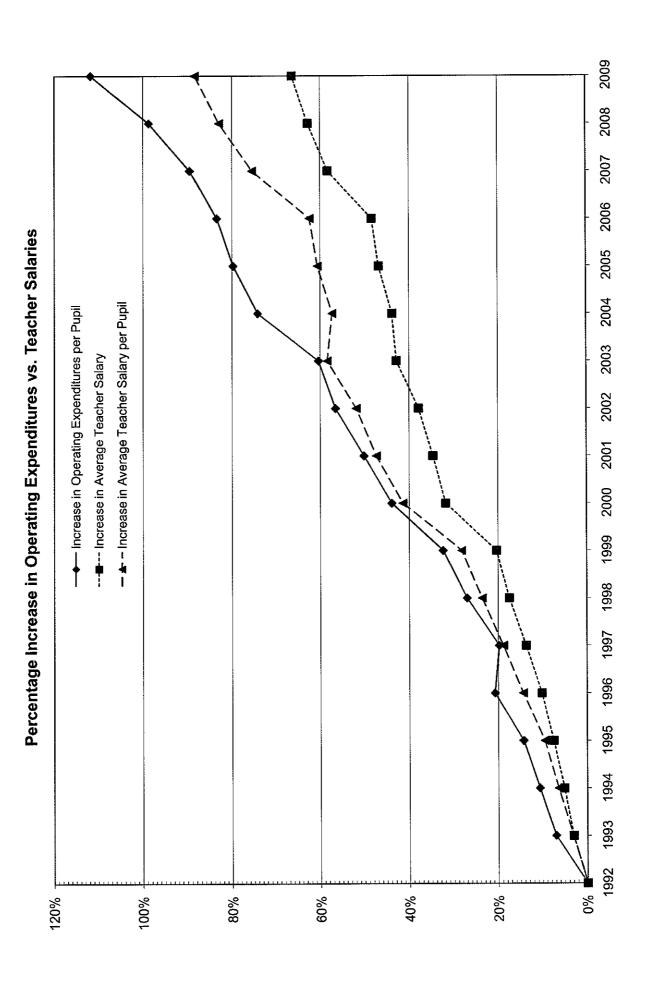
Difference (the amount by which teacher salaries have fallen behind due to insufficient dedication of revenues to teacher salary increases)

\$6,005

\$54,339

Source, <u>Snapshot</u> and <u>Pocket Edition</u>, Texas Education Agency

¹ Average teacher salaries include pay for supplemental duties such as career ladder, extracurricular activities, etc.



Texas Classroom Teachers Association

I. Research supports the fact that teacher experience positively impacts student achievement:

A. "Experience: Consistent with other studies (see, in particular, Hanushek, Kain, O'Brien and Rivkin 2005; Clotfelter, Ladd and Vigdor 2006), we find clear evidence that teachers with more experience are more effective than those with less experience. Compared to a teacher with no experience, the benefits of experience rise monotonically to a peak in the range of 0.092 (from model 4) to 0.119 (from model 5) standard deviations after 21-27 years of experience, with more than half of the gain occurring during the first couple of years of teaching (see attached charts)

Though the positive results by years of teacher experience are clear and robust to various model specifications, the thorny issue remains of whether the rising returns to experience reflect improvement with experience or differentially higher attrition of the less effective teachers. The negative coefficients of -0.019 and -0.033 on the indicator variable in the math equations suggests that the teachers who stay may be less effective on average than the ones who leave, a finding that is inconsistent with the differential attrition explanation for the rising returns to experience. Hence, we conclude that the returns to education that emerge from our basic model are primarily attributable to learning from experience.20" (How and why do teacher credentials matter for student achievement?*, March 2007, Charles T. Clotfelter, Helen F. Ladd, Jacob L. Vigdor, Sanford Institute, Duke University, http://www.caldercenter.org/PDF/1001058_Teacher_Credentials.pdf)

B. "Murnane and Phillips (1981): Controlling for a variety of student and teacher background variables, Murnane and Phillips found that, among teachers in their first seven years of teaching, experience was a significant positive effect on elementary school student achievement. The researchers found a weak negative relationship between experience and student achievement among teachers with eight to 14 years of experience, and a positive effect...for teachers with 15 or more years of teaching experience. They argue that the early-career effect is likely to reflect "learning by doing", while the later-career effect is "vintage effect" that reflects differences in the average abilities of teachers who entered the profession at various points in time.

Ferguson (1991) found that teacher experience accounted for slightly more than 10% of the variation in student reading and math scores across almost 900 Texas school districts serving over 2.4 million students. In the elementary grades, Ferguson found...that once teacher have five years' experience, additional years of teaching do not add to their effectiveness. For high school students...he found that teachers with nine or more years of experience were associated with higher student scores than teachers with only five to nine years of experience.

Grissmer et al's (2000) analysis of state-level NAEP data included an investigation of the relationship between the proportion of teachers in a state with more than two years of experience and elementary student performance on the NAEP. They found that in states where a high proportion of teachers in a state with more than two years of experience, there is a discernible, positive effect on achievement.

"Summary: While research indicates that there is a relationship between student achievement and teacher experience, at the elementary level it appears that the relationship is most evident in the first several years of teaching, with some evidence of vintage effects for very experienced teachers. Estimates of the effect of teacher experience on High School student achievement suggest that experience has a more sustained effect that continues later into teachers' careers." (Teacher Quality, Understanding the Effectiveness of Teacher Attributes, By Jennifer King Rice, August 2003, Economic Policy Institute.

http://www.epinet.org/content.cfm/books teacher quality execsum intro#ExecSum)"

- C. "I also find evidence that teaching experience significantly raises student test scores, particularly in reading subject areas. Reading test scores differ by approximately 0.17 standard deviations on average between beginning teachers and teachers with ten or more years of experience." (The impact of individual teachers on student achievement: Evidence from panel data, Rockoff, J., 2004. American Economic Review, 94 (2), May 2004: 247-252 (see attached)
- D. "Brand new teachers—those who are still learning their craft—are less likely to be effective in enabling their students to meet state standards than teachers with at least a few years of experience.3

³ Robert Gordon, Thomas J. Kane and Douglas O. Staiger. 2006. *Identifying Effective Teachers Using Performance on the Job*. Washington, DC: The Brookings Institution. Available:

http://www.brookings.edu/papers/2006/04education_gordon.aspx.

See also: Don Boyd, Hamilton Lankford, Susanna Loeb, Jonah Rockoff, and Jim Wyckoff. 2007. The Narrowing Gap in New York City Teacher Qualifications and its Implications for Student Achievement in High-Poverty Schools. The Teacher Pathways Project. Available:

http://www.teacherpolicyresearch.org/portals/1/pdfs/NYCTeacherSortingPaperFinal.pdf"

(Their Fair Share: How Texas-Sized Gaps in Teacher Quality Shortchange Poor and Minority Students http://www2.edtrust.org/NR/rdonlyres/0E68E606-0371-4C7D-BEF5-

9D07CA415171/0/TXTheirFairShare.pdf (Feb. 2008))

E "Existing empirical studies suggest that teacher stability rates for high-poverty schools also directly impacts the educational outcomes of students. For example, Hanushek, Kain, O'Brien and Ravin's (2005) investigation found that student achievement gains were considerably lower in classrooms in which teacher turn-over was a factor. The Alliance for Excellent Education (2005) also reported that high teacher attrition rates have negative effects on student achievement. They further stated "A major result of teacher attrition and inadequate induction is that poor, urban, and minority children are taught to be less experienced, less qualified teachers who do not stay long enough to become an expert, high-quality teachers their students desperately need". Likewise, Ingersoli (2001) argued that when qualified urban teachers depart their positions, the students are more opt to be then taught by inexperienced, less qualified teachers, which both have been associated with lower student achievement. Additionally, Boyd, Lankford, Grossman, Loeb,

and Wyckoff (2007) concluded that teacher attrition can negatively influence a school's learning environment. When the teaching force is constantly changing, administrators find it difficult to implement policies and standards that create a school climate conducive to student learning."

(Addressing urban high-poverty school teacher attrition by addressing urban high-poverty school teachers, Educational Research and Review Vol. 3 (1), pp. 001-009, January 2007

http://ednews.org/downloadattachment.php?ald=ed97e696271572fbacc07d87b5e2d823&articleId=22615

Available online at http://www.academicjournals.org/ERR, ISSN 1990-3839 © 2007 Academic Journals)

F. Finally, an article in the Seattle Post-Intelligencer described a recent study by the Washington State Institute for Public Policy, Dec., 2007, which found a dramatic improvement in student achievement between one and five years of teacher experience and a more gradual boost in the years following. Student achievement in these studies was mostly tracked through scores on standardized reading or math tests. The report makes a preliminary recommendation that any changes in the way teachers are paid should emphasize financial rewards for experience rather than higher pay for teachers with graduate degrees (see attached article)

There is research finding that teacher experience does not significantly impact student achievement, but many of those studies have since been discredited. For example, in the 2003 Economic Policy Institute report noted above, authored by Ms. Rice, she reviewed of a wide range of empirical studies that examine the impact of teacher characteristics on teacher effectiveness in order to draw conclusions about the extent to which these characteristics are, in fact, linked with teacher performance. As described earlier, she examined studies that explicitly measured teacher experience as a key treatment. As such,

she rejected studies such as ones identified by Eric Hanushek (1997) that cast doubt on the positive relationship between teacher experience and student achievement as follows:

"Eric Hanushek, (1997) identified 207 studies that included teacher experience as an independent variable predicting student achievement. He found that 29% of the estimates of the impact of experience on teacher quality were statistically significant and positive. 5% were statistically significant and negative, and 66% were not statistically significant. However, Ms. Rice notes that among the statistically significant findings, positive effects are reported almost six times as often as negative effects. "As for the preponderance of statistically insignificant effects, it's not clear from Hanushek's analysis whether the studies were actually designed to test the impact of experience on student achievement, what other variables were included in the models tested, or what measure of teacher experience was employed in the studies. Further casting doubt on Hanushek's conclusions about teacher experience, Greenwald, Hedges, and Laine (1996) conducted a more sophisticated meta-analysis of education production function literature from which they concluded that teacher experience, is, in fact, related to achievement, One explanation for the discordant evidence about the inconsistent impact of teacher experience relates to the measurement of this variable. Most school districts measure and reward teacher experience in terms of years they worked in the district. However, studies examining the impact of teacher experience could instead measure this variable as the total number of years that the teacher has taught. Another explanation for the inconsistent evidence on teacher experience is the way this variable has been used in studies. Most analyses have included teacher experience as a control variable... Typically, these studies...find no evidence of a linear relationship between teacher experience and their effectiveness. Other studies that focus on teacher experience as they key independent variable have found that nonlinear models are far more likely to capture an effect for this variable."